

the elucidation and completion of the flora of Bath since the publication (in 1839) of the 'Supplement to the Flora Bathoniensis.' He points out the errors to be found in that book, and corrects them, and adds a considerable number of species to the list.

Unfortunately, we cannot greatly praise Mr. Trimmer's 'Flora of Norfolk.' As a list of plants *found in the county*, it is doubtless very correct; but as a flora of the county it is very imperfect. There is no attempt to show the distribution of the plants by local divisions. It is an old-fashioned flora, such as might have been published fifty years since, except that its nomenclature and the view taken of species are those of the present day. Whole districts of the county seem not to have been examined, or only in a very superficial manner. If the author had made known his intention of publishing a flora of the county, we know that he might have obtained lists of plants for some of these neglected tracts. Let us hope that a new edition will supply the wants of this one.

#### MISCELLANEOUS.

*On the actual state of our information relative to the 'Leporide,' or Hybrid between Hare and Rabbit.* By Dr. PIGEAUX.

ARE there any sexual relations between the hare and rabbit in a state of nature to which it would be possible to attribute the creation of a mixed or intermediate species, to be named, on account of external configuration, *Leporide*? The ancients, and indeed some of the moderns, deceived by the colours and special forms of certain varieties of rabbits common in the south of Europe and very abundant in Asia Minor, have believed this to be the case. Such varieties are found in some departments of the east of France and along the banks of the Rhône. These are, after all, merely rabbits which burrow, and are born without fur and with the eyes closed. Such are the *Léporides* of M. Roux, and those also which have been and are perhaps still called 'Leporides' at the Jardin d'Acclimatation in Paris. These rabbits pair voluntarily, and are productive either amongst themselves or in conjunction with the ordinary domestic rabbit. I have had in my possession some of them which, from their appearance, might almost have been mistaken for hares, having the tip of the ears black and the inferior surface of the belly and of the thighs tawny; nevertheless, by all characters distinctive of the species, they were never anything but rabbits. Thus I am able to negative the pretensions of M. Roux to having created a race of fertile hybrids begotten through a male hare and several female rabbits.

It is, however, by no means difficult to bring about a connexion between the hare and rabbit in a state of domestication; but for success we must not persist in uniting adult individuals unaccustomed to living together previously. In such a case the female nearly always kills the male, bleeding him at the jugular, or, unless the hutch be very securely fastened, succeeds in dislodging him.

This will occur indeed sometimes when a young male leveret has been brought up with young female rabbits, as soon as they become adult, if the cage be too constrained in its dimensions. In order that the experiment may succeed, it is necessary to provide a cage of a certain extent, say of some metres, barred in some portions and pannelled in others, so that the animals may escape observation at pleasure. It is well also to leave several females with the young male, in order that he may have some range for choice. Such measures were adopted by M. —, of Nanterre, near Paris, whose success has been as complete as it is perfectly attested and indubitable. Several female rabbits were rendered pregnant by the agency of a single male hare existing in his menagerie; he has further been able to rear to the adult state a number of the *mongrels* or, rather, *mules* so obtained between the two species. There were both males and females, apparently strong and well developed; and these paired, but have not been productive, as far as I know, hitherto. I would not deny to these mongrels a fecundity similar in degree to that which is sometimes found in the cross between ass and mare; but such a case is only exceptional, and we can neither fear nor indeed hope to create a new race: so that from this point of view the *Leporides* do not exist.

The instance cited by M. Albert Geoffroy Saint-Hilaire, in which a female hare covered by a male rabbit gave birth to a young already covered with fur, and having the eyes open, is a most remarkable one; it could, however, be merely a case of a cross retaining the form of the mother, and no more fertile than in the case of those hybrids between the Ass and the horse in which the latter animal (the male) gives the predominant character to the offspring.

These experiments may be repeated and varied, proceeding with very young animals brought up together and enjoying a certain liberty, although confined in the hutch. It is of especial importance, in breeding with the male hare, to provide several females, whether of rabbit or of hare, always, however, isolating them as soon as they are ready to bring forth (in twenty-eight or thirty days). That the hare, when in good condition, will produce several times a year admits of no doubt; but as she does not burrow, it is necessary to furnish her with a sufficient quantity of twigs, and to keep them extremely fresh and clean. Although in captivity the hare usually produces only one or two young, she has been known to bring forth three, and to rear them with great tenderness; it is, however, necessary to remove them early from the male, and even from the female, who will often strangle them as soon as they are capable of living independently, especially if they are about pairing again.

The rearing of hares in captivity is but a thankless task, as they do not live long, wanting a sufficient space for running; their flesh, also, is insipid, unless, indeed, they are let loose some months previously in an area perfectly free from rabbits; for between these two species there rages a most inveterate war; and a single rabbit would with ease strangle fifty hares in one night. The female, also, is not very productive, and ceases to bear after the third year.

To sum up, therefore, we would affirm that *Leporides* exist undoubtedly under both forms, with predominance of the hare or of the rabbit; but as a species, or even a variety, we cannot admit them, since, like all other crosses, they have merely an accidental productiveness. Their utility moreover is but slender, the flesh having neither the whiteness of the rabbit nor the fine flavour of the hare. Pretty much the same thing may be said of hares reared in hutches; their flesh lacks flavour, and their multiplication is too limited to render them a profitable object of industry.—*Bulletin mensuel de la Société Impériale zool. d'Acclimatation*, 2<sup>me</sup> série, tome iii. No. 7, July 1866.

*Megaceros hibernicus in the Cambridgeshire Fens.*

By NORMAN MOORE, Esq.

Early this year some diggings for phosphatic nodules were opened near Upware, a village on the Cam, about twelve miles below Cambridge. I have several times visited the workings in company with Mr. J. F. Walker, B.A., F.G.S., Examiner in Natural Science at Sidney Sussex College; and whilst he was occupied with the Lower-Greensand fossils, I paid more particular attention to the surface soil. Some fragments of roebuck horns and teeth, one horn of a red deer, and various other bones have been the result. One of the roebuck horns is notched on each side, as if to afford a fastening-place for string, and the points are rubbed smooth; hence one might suppose that the horn was used, centuries ago, as a net-peg. While at Upware, on my last visit to the bed, a few days ago, I heard that a man in the neighbouring village of Wicken had an elephant's bone, which he had dug out of the surface soil while working at the coprolite-diggings in Burwell Fen. I luckily fell in with the man and the bone, which, to my delight, I saw belonged to an Irish elk. It was an almost perfect and well-marked ulna, evidently of a full-grown animal. The man informed me that several bones of like appearance were found with this one. They were sold for a small sum to a bone-dealer; this was kept as a curiosity because of its curious shape, "like a pistol." It is of a dark peat-colour. As far as I can judge by a comparison of the relation which the length of the ulna bears to the height of the shoulder from the ground in the Irish elk in the Woodwardian Museum, I suppose that the animal to which this ulna belonged cannot have been less than eighteen hands high.

St. Catharine's College, Cambridge.

*Note on Assiminea Francesiæ.* By Dr. J. E. GRAY, F.R.S. &c.

In the 'Annals and Magazine of Natural History' for June last, at p. 381, Mr. Blandford makes some observations on the various terminations which have been given to the name of the shell called *Assiminea Francesiæ*. I may state that I originally described the shell as above, naming it after my sister, Frances Ince, who made a